ABSTRACT OF THE DISCLOSURE

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In a method of surveying a track (9), a first or mobile measuring vehicle (1) and a second or stationary measuring vehicle (2) are placed at a distance apart from one another on a track section to be measured. A reference line (14) is formed by a laser beam emitted from the stationary measuring vehicle (2). At the start of each measuring cycle, by using a GPS receiver (19), the relative position of the stationary measuring vehicle (2) with reference to a fixedly installed GPS reference station (29) located adjacent to the track section is determined, the said GPS reference station being known within a terrestrial coordinate system. The reference line (14) is aligned with the mobile measuring vehicle (1) on the basis of the determined position data, and the track surveying operation is carried out by advancing the mobile measuring vehicle (1) while changes of the actual track position relative to the reference line (14) are registered.